

Amendments to the Specification:

Please replace the paragraph 0030 beginning at page 9, Line 1, with the following rewritten paragraph:

A1 [0030] Referring to Figure 5, a 2D excitation targeting a 5cm by 5cm region centered at $x=6.6\text{cm}$ and $y=3.0\text{cm}$ inside a 30cm-wide subject was studied as an example. As a reference, the task was first approached with a body transmit coil and known excitation methods. One design used 57 $k_x=\text{constant}$ lines at $\Delta k_x=1/28$ cycles/cm resulting in an x-direction localization as shown in Fig.5D. Its acceleration was then tackled with the transmit coil array and the present methods described herein. One design that represents a 4-fold acceleration employed 14 $k_x=\text{constant}$ lines at $\Delta k_x=1/7$ cycles/cm. $u_3(m\Delta k_x)$ and $u_5(m\Delta k_x)$, the k_x -direction weighting contributed by the coils positioned at $x=12\text{cm}$ and $x=4\text{cm}$ respectively, as computed with Equation 4, are illustrated in Fig.5B-C. Localization along x due to each of the 10 coils is shown in Fig.5A (amplitudes). Note that while the first ~~aliasing~~ aliasing side lobes were 4 times closer to the target due to the sampling density reduction, the net amplitudes of these as well as other aliasing lobes that located inside the subject were negligible as a result of incoherent addition. Localization from the parallel excitation matched well that of the body coil (Fig.5D), and was as well refocused (the imaginary component, not shown, was very small). As used herein, "parallel excitation" refers to simultaneous excitation by multiple coils. Lack of coils contributing from beyond the present array's boundary caused residual aliasing lobes (incomplete annihilation) near the array's ends. For a wider subject that is subject to this boundary effect, a remedy is to extend the array or adjust boundary coils' weighting.